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## **Proposed Priority: Environmental Management Systems at Federal Facilities**

### **Universe and Types of Facilities**

Federal facilities, like all other regulated facilities, are responsible for complying with environmental regulations and requirements. Federal agencies and facilities are likewise accountable to the public for general environmental stewardship. In addition, Federal agencies are responsible for implementation of a variety of environmental Executive Orders designed to promote environmental leadership, stewardship and sustainability across the Federal government.

The Federal government owns and leases vast amounts of property in the United States. According to the General Services Administration, as of September 30, 2002, the total amount of Federally owned or leased property is approximately 670 million acres. This represents approximately 30 percent of all land in the United States. The total area of Federally-owned or leased buildings amounts to approximately 3 billion square feet.

According to EPA, there are approximately 8,000 Federal facilities across the United States that engage in some type of activity where the Federal government is formally accountable under environmental regulation. The Federal government covers a broad array of unique facility types from industrial facilities occupied by Department of Defense, Department of Energy and NASA operations to land management “facilities” that are managed by agencies such as the Forest Service and National Park Service and cover thousands of acres. Federal facilities also include operations such as hospitals and laboratories as well as administrative offices. In addition, Federal facilities may be operated by contractors or may include concessioners or other entities where activities are not directly managed by the Federal facility operators.

### **Environmental Risks**

Federal facilities are responsible for a number of environmental challenges, including compliance with various environmental statutes and implementing regulations established under those statutes as well as basic operational stewardship and management of lands where contractors, concessioners and permit holders operate. In addition, as previously mentioned, there are a number of Executive Orders from current and previous Administrations that call for enhanced environmental stewardship across the Federal government. These initiatives cover a range of operational, procurement and management policy directives that are required of the Federal community. Below is a brief summary of environmental challenges faced by some types of Federal Facilities:

DOD is charged with defending the interests of the United States anywhere in the world. As such, DOD maintains thousands of installations in the United States to provide the necessary

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infrastructure for the armed services to meet this mission. Installations range in size from a few acres to thousands of square miles; their missions range from logistics and training

to manufacturing and rebuilding aircraft and ships. Many of these installations are the equivalent of small cities, and thus they possess all of the infrastructure (e.g., hospitals, sewage treatment plants, roads, airports) associated with city environments. Much of the support activity associated with DOD's mission is industrial involving maintenance and repair of complex and frequently large systems and equipment. As such, facilities use a broad array of processes involving chemicals such as paints and solvents. Therefore, DOD installations face compliance issues relating to air and water pollution and solid/hazardous waste generation.

DOE is involved in electric power generation and transmission, fuel research, petroleum storage, and nuclear weapons research and production. Many of DOE's approximately 350 installations are dedicated to laboratory research. DOE laboratories work on a variety of issues including solar energy, battery development, energy transmission methods, atomic energy, fossil fuels, and nuclear weapons. Some laboratories are located on large compounds such as Savannah River, SC, Los Alamos, NM, and Oak Ridge, TN, while others are part of university systems such as the Fermi Lab in Chicago. Like DOD, the large-scale manufacturing and industrial nature of many DOE activities presents DOE with a broad range of environmental compliance issues.

Civilian Federal Agency (CFA) facilities range in size and scope from single-purpose buildings to extensive multipurpose compounds. Regulated activities may include vehicle fleet management, construction, facility operation, scientific and medical research, materials storage and shipment, and many others. Because of the diversity of CFA activities, as a group, they face environmental compliance issues as extensive as those faced by many industrial Federal facilities. In addition, in the case of land management agencies, facilities must understand and respond to environmental management issues such as natural resource protection and preservation as well as potential impacts from operations such as mining and timber harvesting and visitors using the facility for recreation.

For more information on environmental regulations associated with common activities at Federal facilities go to [www.epa.gov/fedsite/](http://www.epa.gov/fedsite/).

### **Noncompliance Information**

In recent years, the Federal facility compliance rate with the Resource Conservation and Recovery Act (RCRA) has increased steadily. In contrast, the compliance rate for Clean Water Act, National Pollutant Discharge Elimination System (CWA/NPDES) has decreased overall with a slight increase in compliance in the most recent reporting year. The compliance rates for

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the Clean Air Act (CAA) fluctuated in recent years, increasing slightly during the last reporting year. The compliance rate for Safe Drinking Water Act (SDWA) has declined slightly in recent years.

To enhance and better maintain regulatory compliance and environmental stewardship, EPA plans to foster a more effective implementation of environmental management systems (EMS) by Federal facilities. An EMS is a tool that can accomplish or facilitate the implementation of many environmental requirements and expectations facing Federal agencies. An EMS is a process and framework used by an organization to manage its environmental affairs and issues, most notably those areas where the entity interacts with or affects the environment, as well as where legal requirements exist. The key to success is understanding the relationships and linkages among the various issues and requirements, and being cognizant of how they all fit into the EMS framework. The type of EMS currently being envisioned by most Federal agencies is generally modeled using the *Plan, Do, Check, Act* management concept. The private sector experience in applying management system principles to environment regulatory and stewardship issues has shown that this organized approach is both prudent and effective and can improve efficiency as well as regulatory compliance.

In the past Federal environmental programs have focused on regulatory compliance as the goal and accepted standard for environmental management. This reactive approach has limited the ability of organizations to implement a process or plan to address and prevent environmental impacts. The EMS concept represents a fundamental change from a traditional, reactive, compliance-based, stand-alone environmental management programs to a proactive, impact-predicting *management system* that is focused on the mission and embedded in everyday business processes and mission activities. The EMS approach suggests that “stovepiped” environmental programs do not sufficiently integrate mission activities and business processes to identify and mitigate potential environmental impacts during the planning stages and to ensure environmental excellence.